

AMENDMENT

Please amend the specification as follows:

Please replace the paragraph on page 8, lines 11-13 with:

C | Figures 1a and 1b show aligned amino acid sequences for the *C. elegans* C54D2.5 α_1 calcium channel subunit and initially identified portions of the calcium channel subunits of the invention.

Please amend the claims as follows:

Please cancel claims 16-27.

Please replace the present claims 28-33 with the following claims 28-33:

28. (Amended) A DNA molecule which comprises an expression system for the production of a calcium ion channel α_1 subunit protein which expression system comprises a nucleotide sequence encoding a functional T-type, low voltage activated calcium channel α_1 subunit or the complement to said encoding nucleotide sequence, wherein said encoding nucleotide sequence comprises

(a) a nucleotide sequence encoding the amino acid sequence encoded by SEQ. ID. NO: 18; or
(b) the complement of a nucleotide sequence that hybridizes under conditions of medium hybridization stringency to the nucleotide sequence of (a).

C 2 | 29. (Amended) The DNA molecule of claim 28 wherein said encoding nucleotide sequence encodes the amino acid sequence encoded by SEQ. ID. NO: 18.

30. (Amended) The DNA molecule of claim 29 wherein said encoding nucleotide sequence is that set forth in SEQ. ID. NO: 18.

31. (Amended) Recombinant host cells which are modified to contain the DNA molecule of any of claims 28-30.